September 1998



Office of Air Management

Lower Reid Vapor Pressure Gasoline

Description

Lower Reid Vapor Pressure (RVP) gasoline is a fuel control measure that is used during the ozone season to reduce emissions of volatile organic compounds (VOCs) from mobile sources. Currently, gasoline with an RVP of 9.0 psi is sold in most counties in Indiana. Gasoline with an RVP of 7.8 psi is sold in Clark and Floyd Counties during the ozone season. By switching from fuel with an RVP of 9.0 psi to a fuel with an RVP of 7.8 psi, the exhaust emissions are reduced. Fuel with a lower volatility achieves emissions reductions in ozone precursors by reducing aromatic hydrocarbon emissions from gasoline and thereby reducing its ability to evaporate as quickly. This fuel is a southern grade fuel which has been used for several years in many southern states during the summer months.

Emission Reductions

The implementation of this measure would reduce emissions of volatile organic compounds from:

- motor vehicles:
- small gasoline powered lawn and garden equipment; and
- nonhighway mobile sources (such as motor boats).

Estimated Cost

U.S. EPA has estimated the cost of implementing lower RVP gasoline is \$0.01 to \$0.03 per gallon over the cost of conventional fuel and the cost effectiveness to be approximately \$400 per ton of VOC reduced.

Implementation Issues

Driveability/Mileage Issues: The introduction of gasoline with an RVP of 7.8 psi in Clark and Floyd Counties began in the summer of 1995, without any consumer complaints of losses in fuel economy, noticeable difference in driveability, or distribution problems.

Implementation Issues (cont.)

Availability of Fuel: Gasoline with an RVP of 7.8 psi is currently being produced by several major suppliers in southern Indiana. There have been no problems in supplying the fuel in Clark and Floyd Counties.

Actual Cost Increases: Even without special fuel, gasoline prices fluctuate. The price of conventional gasoline in Clark and Floyd Counties varies from \$0.01 to \$0.03 between stations. During the summer of 1995, with the introduction of 7.8 RVP fuel, the prices increased, on average, by \$0.02 per gallon of fuel.

Comments

To learn more about lower reid vapor pressure gasoline, contact Pat Daniel at (800) 451-6027 press zero and ask for extension 3-0429 or dial (317) 233-0429 direct.